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COMHELTACWINGPACINST 4790.1G
N4
21 SEP 2001

COMHELTACWINGPAC INSTRUCTION 4790.1G

Subj: INSPECTION OF AERONAUTICAL MAINTENANCE PROGRAMS AND MATERIAL CONDITION OF AIRCRAFT, AVIATION LIFE SUPPORT SYSTEMS (ALSS), WEAPONS, AND SUPPORT EQUIPMENT (SE)

Ref: (a) COMNAVAIRPACINST 4790.44C
(b) COMPUTERIZED SELF-EVALUATION CHECKLIST (CSEC)

Encl: (1) MCI Preparation Requirements for H-1 Aircraft
(2) MCI Preparation Requirements for H-3 Aircraft
(3) MCI Preparation Requirements for H-46 Aircraft
(4) MCI Preparation Requirements for MH-60 Aircraft
(5) Sample Message Format for Requesting Authorization to Perform Pre-deployment/Post-deployment Inspections
(6) Sample Message Format for Material Condition Inspection Report

1. Purpose. To consolidate inspection requirements for aircraft, SE, weapons and ALSS material condition and maintenance programs within the responsibility of COMHELTACWINGPAC (CHTWP).

2. Revision. Due to an extensive rewrite of this directive a complete review of this revision is recommended.

3. Cancellation. COMHELTACWINGPACINST 4790.1F.

4. Discussion. Mission readiness is directly dependent upon the material condition of a unit's aircraft and associated equipment. The inspections outlined in this instruction are intended to ensure satisfactory or better material condition in support of operational requirements. Reference (a) addresses programs that have the potential for serious degradation in readiness and safety. These programs will be given more frequent emphasis.

5. Action. CHTWP Maintenance Advisory/Inspection Teams will perform Aviation Maintenance Inspection/Maintenance Program Assist visits on all applicable maintenance programs listed in reference (b) and Material Condition Inspections on aircraft, ALSS, SE and weapons. Units will request Material Condition Inspections via naval message to CHTWP (N4) with appropriate lead-time to ensure scheduling availability (at least 60 days prior). The requested MCI date must be within 90 days of the return from deployment.

a. Aviation Maintenance Inspection (AMI) is an in-depth evaluation of all facets of "O" level aviation maintenance program management. An AMI will be conducted by CHTWP on subordinate units (excluding HC-3 Fleet Readiness Squadron) once every 18-24 months utilizing reference (b). HC-3 FRS will be inspected by CNAP with a Type Wing maintenance management team observing. Detachments will be inspected once every 18-24 months or prior to each deployment of 120 days or more, whichever comes first.

(1) Evaluations will be conducted IAW the Computerized Self-Evaluation Checklist (CSEC), reference (b).

(2) Commands are encouraged to utilize the CSEC as a tool to ensure strict compliance to NAMP procedures.

(3) While not required, it is recommended that commands request a Maintenance Program Assist visit prior to a scheduled AMI to allow adequate time and assistance to correct any program deficiencies or addressing recommendations.

(4) Aircraft Extended Range Fuel Tanks will be inspected for material condition.

b. Maintenance Program Assist (MPA) visit is a by-request, in-depth look at each of the programs listed in reference (b), and is an excellent training/learning experience for squadron maintenance program managers. MPA results remain with the visited command (unless safety of flight or personnel issues are noted, in which case the results shall be reported to CHTWP).

(1) An MPA on any individual maintenance program listed in reference (b) will be conducted by CHTWP upon request. However, an MPA will not be performed less than 90 days prior to a scheduled AMI. All requests should be submitted, via naval message, at least 90 days prior to the desired assist visit date.

(2) CHTWP will conduct detailed, one-on-one training sessions and debriefs with the program managers.

(3) CHTWP will explain and interpret the intent of OPNAVINST 4790.2 (series).

(4) For all programs viewed as "off-track," the command will be asked to develop and submit a POA&M for correction of deficient areas to CHTWP (N4) within ten working days of the MPA completion. Upon request, CHTWP will assist in POA&M development. CHTWP (N4) will coordinate the required training and assistance for each"off-track" program and arrange a final assessment to

ensure correction of all program deficiencies. Final assessments should be completed at least 30 days prior to a scheduled AMI.

c. Material Condition Inspection (MCI) is a detailed inspection of aircraft, aviation life support systems (ALSS), weapons and assigned support equipment (SE) to determine equipment material condition and serviceability.

(1) An MCI shall be performed once every 18–24 months for non-deploying units and should normally be conducted in conjunction with the AMI/MPA. HC-3's MCI will be performed prior to the CNAP AMI. The goal is to reduce the frequency of command inspection requirements.

(2) Post–deployment MCI's will be performed on, but are not limited to, all units deployed for more than 90 days continuously. A detailed inspection of each aircraft system and piece of support equipment is not necessary. But, the number of aircraft/systems/equipment inspected will be sufficient to reflect a representative overall material condition of the unit's total aircraft and equipment inventory. If the aircraft/systems/support equipment initially selected for inspection are found to be unsatisfactory, the inspecting officer shall inspect additional aircraft/equipment to determine the extent of critical discrepancies. Units deploying with less than four aircraft shall have all aircraft prepared IAW enclosures (1) through (4), as applicable. Shore based squadrons will be informed by the inspection team of the number of aircraft to be prepared (minimum 30%). The unit should have all ALSS equipment, weapons, SE and applicable publications available for inspection.

6. Special Requirements/Circumstances

a. When extenuating circumstances preclude the availability of a CHTWP inspection team (i.e., scheduling conflicts, short notice commitments, geographical location, etc.), CHTWP commands may request authorization to perform an internal post-deployment MCI of assigned detachments via naval message using enclosure (5) When authorization is granted, the inspection will be performed by the parent command's Quality Assurance Division within the guidelines of reference (a) utilizing enclosures (1) through (4), as appropriate. Inspection results shall be reported via naval message using enclosure (6) to CHTWP (N4) within five (5) working days of inspection completion.

b. CHTWP will visit Guam on an annual basis in order to conduct inspections for HC-5. Due to the special circumstances experienced by HC-5, the following deviations apply:

(1) AMI inspections shall be performed on detachments prior to deployments in excess of 120 days.

(2) AMI/MCI inspections will also be performed whenever the MCAS Iwakuni detachment is rotated (approximately every six months) prior to or as part of the detachment turn-over.

(3) For any detachment that may miss a scheduled CHTWP inspection, waivers shall be requested via naval message. In the event of such a waiver, HC-5 Homeguard Quality Assurance will be authorized to perform the AMI/MCI and will forward the results to CHTWP. AMI/MCI training will be provided to HC-5 Homeguard QA during CHTWP's annual visits.

c. The CHTWP Maintenance Advisory/Inspection Team shall inspect the material condition of all aircraft transferred outside CHTWP cognizance. Aircraft will be inspected/inventoried by a joint team consisting of at least one representative from CHTWP and representative personnel from each of the transferring and receiving commands whenever practicable.

7. Procedures

a. To prevent scheduling conflicts, CHTWP (N4) will schedule required inspections/visits making every attempt to meet squadron desires. A re-inspection within thirty days will be required for any area judged "off-track." AMI results will be returned to CHTWP (N4) with a command cover letter signed by the respective Commanding Officer. An unsatisfactory MCI grade for aircraft or SE material condition will be cause for immediate inspection of additional aircraft and/or equipment to determine the extent of the deficiencies. Inspection results will be discussed with the Commanding Officer, Officer-in-Charge, or their designated representative(s). The results of inspections will be published as required by reference (a).

b. The squadron/detachment, after scheduling an inspection, will ensure the following actions are completed prior to commencement of the aircraft MCI:

(1) Provide the inspectors with a list of known material condition discrepancies and outstanding P&E requests. The list should not include discrepancies relating to equipment operations and/or functional discrepancies (i.e., AFCS mop, fuel flow indicator fluctuates, tail position light burned out, etc).

(2) Prepare required aircraft for inspection utilizing enclosures (1) through (4), as applicable.

(3) Make available extended range fuel tanks.

(4) Assign a command representative to assist and record discrepancies for each COMHELTACWINGPAC inspector during the MCI.

c. The MCI will include the following areas:

(1) Airframes, powerplants, avionics, electrical systems and weapons.

(2) Aviation Life Support systems, including aircrew gear.

(3) Support equipment.

(4) Extended range fuel tanks. (Also examined during AMI.)

d. When critical discrepancies exist, the senior inspecting officer may increase the scope and depth of the inspection to determine causative factors. The expanded inspection shall focus on:

(1) General Maintenance (i.e., aircraft washing, servicing and compliance with periodic maintenance requirements).

(2) Preservation and protection of aircraft and equipment, to include both operational aircraft/equipment and those out of service in excess of 28 days.

(3) Hydraulic contamination control program.

(4) Aircraft and equipment logbooks and configuration management.

8. MCI Criteria Guidelines

a. Critical - Any discrepancy that impacts safety of flight, as follows:

(1) Material condition neglect.

(2) Chaffing high-pressure hydraulic lines that are found to have visible signs of wear in the metal line, fittings and couplings.

(3) Chaffing wiring harness lines or bundles that could start a fire. (through the first layer insulation)

(4) FOD found in or near engines/intakes/flight controls.

(5) Jammed or binding flight controls and missing locking devices on flight controls (i.e. cotter keys, safety wire, snap ring, keys).

(6) Fuel, Oil and Hydraulic leaks that are found to be out of limits.

Note: These are examples. Discrepancies found and deemed by the inspector to be a safety of flight hazard or that indicate obvious maintenance neglect will be classified as critical.

b. Major - Any discrepancy that impacts Mission Capability (can be downing discrepancies under the MESM). These are discrepancies that if left uncorrected could cause damage to equipment or injury to personnel, as follows:

(1) Misrouted electrical wires, fluid or drain lines that could lead to chaffing or are deemed in poor condition and could cause system failure.

(2) Exfoliation corrosion that is widespread throughout an aircraft, or corrosion requiring P&E repairs (that does not impact safety of flight).

(3) FOD found throughout aircraft in areas other than engines/intakes/flight controls.

(4) Fuel, oil and hydraulic leaks within limits but not documented.

(5) Maintenance performed that deviates from MIM's/MRC's.

Note: These are examples. Discrepancies that are found and deemed by the inspector to fall under this category may be classified as major.

c. Minor - Discrepancies found that are not mission impacting or safety of flight related, as follows:

(1) Rust, surface corrosion, chipped paint etc.

(2) Micro FOD.

(3) Any other discrepancy not previously documented that is not safety of flight or mission impacting.

Note: Any discrepancies identified and documented by the command during MCI preps (in an area of scheduled inspection cycles) that indicate long term neglect will be considered MCI discrepancies.

9. Satisfactory and Unsatisfactory Criteria

a. Satisfactory

(1) Aircraft. Material condition is considered adequate to complete the remainder of the operating service period.

(2) ALSS. Material condition is considered adequate to ensure full functionality. No discrepancies have been determined to compromise personnel safety or equipment/system integrity.

(3) SE. Material condition is considered adequate to provide for intended support. No discrepancies have been determined to be safety hazards or indicative of obvious long-term neglect.

b. Unsatisfactory

(1) Aircraft. Material condition is inadequate to complete the remainder of the operating service period. Discrepancies are considered to be severe and/or numerous to the extent that they could lead to safety of flight concerns or are indicative of obvious long-term neglect.

(2) Safety of flight. The following discrepancies are considered significant enough to grade an MCI as unsatisfactory:

(a) Urgent and/or immediate technical directives specifically affecting safety of flight or personnel that are overdue.

(b) Any major corrosion discrepancies that were identified and have not been corrected within the required time frame. Additionally, any inspected aircraft with a significant number of corrosion discrepancies as determined by the inspector that is indicative of obvious, long-term neglect.

(c) Out of limit FOD hits on engine blades.

(3) ALSS. Discrepancies identified that could compromise safety of personnel or prevent proper functioning of the equipment/system.

(4) SE. Equipment found to be hazardous to operate and/or unable to provide the intended support. Excessive corrosion or material condition indicative of obvious neglect and/or misuse. Records which indicate preventive maintenance is not being performed.

(5) Paint schemes. Aircraft not painted in accordance with CNAPINST 4750.4A CH-1/CNALINST 4750.5D, NAVAIR, 01-1A-509 and other applicable directives and have major Tactical Paint Scheme (TPS) discrepancies. Major Paint Scheme discrepancies include aircraft painted with unauthorized colors (i.e., red, blue, green, etc.). The only exception to this is the one aircraft tail section authorized to be painted with the squadron/air wing colors as outlined in CNAPINST 4750.4A CH-1/CNALINST 4750.5D. The overall grade for the MCI shall be unsatisfactory and require re-inspection if there are major paint scheme discrepancies. The Corrosion Control Program shall be graded "needs more attention" if there are minor discrepancies related to TPS. Minor is defined as a "few" markings applied in the wrong size or unauthorized shades of the color gray.

Note: The total preparedness of the aircraft in terms of cleanliness and upkeep is also taken into consideration by the inspectors.

R. WEYRICK

Copy to:
COMHELTACWINGPACINST 5216.1D
List II, IV

AIRCRAFT MATERIAL CONDITION INSPECTION (MCI) PREPARATION REQUIREMENTS FOR H-1 AIRCRAFT

Per applicable MIMs:

1. Remove all engine, transmission, combining gearbox cowl panels, and fairings.

2. Remove intermediate gearbox access fairing.

3. Open all tail rotor driveshaft hinged covers along top of tailboom and on front of vertical fin.

4. Open battery compartment door.

5. Open all avionics compartment doors.

6. Remove all ALSS gear and troop seats.

7. Remove auxiliary fuel bags, if installed.

AIRCRAFT MATERIAL CONDITION INSPECTION (MCI) PREPARATION REQUIREMENTS FOR H-3 AIRCRAFT

Per applicable MIMs:

1. Open all tail drive shaft fairings.
2. Remove intermediate gearbox access fairing.
3. Remove tail gearbox access fairing.
4. Open engine service platforms.
5. Open transmission service platform.
6. Remove oil cooler and tail drive shaft access panel.
7. Fold pylon.
8. For UH-3 only; remove cabin interior (VIP package).
9. Remove decking as required when notified.

7. CORRECTIVE ACTION TAKEN OR PROPOSED: IF APPLICABLE.

INCLUDE DEFICIENCIES NOTED THAT REQUIRE HELTACWINGPAC

ASSISTANCE.

8. NAME OF SHIP TO WHICH DETACHMENT ASSIGNED.//

NOTE: SELECTED MAINTENANCE PROGRAMS WILL BE INSPECTED ONLY WHEN THE MATERIAL CONDITION OF THE INSPECTED AIRCRAFT/SUPPORT EQUIPMENT/WEAPONS ARE FOUND TO BE UNSATISFACTORY.

AIRCRAFT MATERIAL CONDITION INSPECTION (MCI) PREPARATION REQUIREMENTS FOR H-46 AIRCRAFT

Per applicable MIMs:

1. Remove all ALSS gear, troop seats, and cabin wire bundle covers.

2. Remove cockpit decking, cabin and ramp center decking.

3. Remove forward transmission drip pan.

4. Remove/open all tunnel fairings/panels.

5. Remove APP access cover, panel 21.

6. Remove LH and RH main alighting gear access fairings.

7. Remove/open all stub-wing fairings and inspection panels.

8. Open forward and aft pylon clamshells.

9. Open aft pylon work platform, panel 17.

10. Remove pilot and copilot emergency escape doors.

AIRCRAFT MATERIAL CONDITION INSPECTION (MCI) PREPARATION REQUIREMENTS FOR MH-60 AIRCRAFT

Per MIMs.

1. Open all panels and prep aircraft to the level of a 56 Day inspection

2. Remove all ALSS gear, troop seats, cabin soundproofing and remove pilot/co-pilot seats.

3. Remove Main Gearbox drip pan.

4. Any additional areas identified by the Wing Inspectors.

SAMPLE MESSAGE FORMAT TO REQUEST AUTHORIZATION TO PERFORM PRE-DEPLOYMENT/POST-DEPLOYMENT INSPECTION

FM PARENT COMMAND
TO COMHELTACWINGPAC SAN DIEGO CA//N4//

BT

UNCLAS (OR APPROPRIATE CLASSIFICATION) //N04790//

SUBJ/POST-DEPLOYMENT MATERIAL CONDITION INSPECTION OF

/DETACHMENT _____//

MSGID/GENADMIN/ORIGINATOR//

REF/A/TEL/PARENT COMMAND/DATE//

REF/B/DOC/CHTWP/4790.1G/DATE//

NARR/REF A IS PHONCON BETWEEN _____. REF B,

ESTABLISHES INSPECTION REQUIREMENTS.//

RMKS/1. PER REF A, REQUEST AUTHORIZATION TO PERFORM SUBJECT

INSPECTION PER REF B DURING THE WEEK OF_____.

2. (PARENT COMMAND) POC: _____, CODE ____, AUTOVON

_____.//

BT

SAMPLE MESSAGE FORMAT FOR MATERIAL CONDITION INSPECTION REPORT

FM INSPECTING COMMAND (HC-5/Other HC when necessary)
TO COMHELTACWINGPAC SAN DIEGO CA//N4//
COMNAVAIRPAC SAN DIEGO CA//N4//

BT

UNCLAS (OR APPROPRIATE CLASSIFICATION) //N04790//

SUBJ/(UNIT/DETACHMENT) ACFT AND SE MATL COND INSP RPT,
/_____ COMHELTACWINGPAC RCS 4790/1//

MSGID/GENADMIN/ORIGINATOR//

REF/A/DOC/CHTWP/4790.1G/DATE//

AMPN/REF A, ESTABLISHES INSPECTION REQUIREMENTS.//

RMKS/1. PER REF A, POST-DEPLOYMENT MATERIAL CONDITION

INSPECTION WAS COMPLETED ON (DATE).

2. OVERALL ADJECTIVE GRADE ASSIGNED: (SATISFACTORY OR

UNSATISFACTORY).

3. TYPE/MODEL/SERIES OF ACFT INSPECTED:

BUNO:

4. ASSESSMENT OF ACFT MATL COND: (SEE NOTE)

ASSESSMENT OF SE MATL COND: (SEE NOTE)

5. EFFECTIVENESS OF UNIT'S MAINT PROGRAMS: (SEE NOTE)

6. ADDITIONAL COMMENTS: (IF DEEMED NECESSARY)